

Świąteczne ale widawa

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **28**
- SRM **27.1**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **27.3 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20.5 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|--------|------|
| Grain | Viking Pilsner malt | 2.67 kg (32.6%) | 82 % | 4 |
| Grain | Monachijski | 1.33 kg (16.3%) | 80 % | 16 |
| Grain | Strzegom Bursztynowy | 1.33 kg (16.3%) | 70 % | 49 |
| Grain | Barley, Flaked | 0.53 kg (6.5%) | 70 % | 4 |
| Grain | Viking melanoidynowy | 0.4 kg (4.9%) | 75 % | 60 |
| Grain | Strzegom Karmel 600 | 0.24 kg (2.9%) | 68 % | 601 |
| Grain | Strzegom Czekoladowy jasny | 0.2 kg (2.4%) | 68 % | 400 |
| Grain | Strzegom Czekoladowy ciemny | 0.13 kg (1.6%) | 68 % | 1200 |
| Sugar | Milk Sugar (Lactose) | 0.67 kg (8.2%) | 76.1 % | 0 |
| Sugar | Brown Sugar, Light | 0.67 kg (8.2%) | 100 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------|--------|------|------------|
|---------|------|--------|------|------------|

| | | | | |
|------|-------------------|---------|--------|-------|
| Boil | Marynka | 26.67 g | 60 min | 8.7 % |
| Boil | Lublin (Lubelski) | 26.67 g | 60 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|---------|------------|
| t-58 | Ale | Dry | 30.67 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------------------|---------|---------|-------|
| Spice | przyprawa do piernika | 40 g | Boil | 5 min |
| Flavor | skórka pomarańczowa | 26.67 g | Boil | 5 min |
| Flavor | chilli | 0 g | Boil | 5 min |
| Spice | kakao | 3.33 g | Boil | 5 min |
| Flavor | jałowiec | 6.67 g | Boil | 5 min |